VILLAGE OF MARCELLUS

Design Standards and General Guidelines For Telecommunication Facilities Adopted October 28, 2019

These Standards and General Guidelines were adopted by the Village of Marcellus Board of Trustees on October 28, 2019, pursuant to Chapter 231 Section 231-11(d) of the Village of Marcellus Code, relating to the placement of small cell wireless facilities in the Village of Marcellus.

A. General Design Guidelines

- Compliance. All Communications Facilities shall be designed, constructed, operated, maintained, repaired, modified and removed in strict compliance with all current applicable technical, safety and safety-related codes, including, but not limited to the most recent editions of the American National Standards Institute (ANSI) Code, National Electrical Safety Code, National Electrical Code, the Village of Marcellus Code, and any other applicable local, state, and federal rules and regulations.
- 2. Underground Utilities. All service lines to the proposed Communications Facility shall be underground if all other utilities in the immediate area are also underground.
- 3. Power and Fiber Optic Supply.
 - a. Independent Power Source Required. Communications Facilities subject to a License Agreement may not use the same power source providing power for the existing facilities original to the purpose of the Support Structure, unless specifically authorized by the owner of the Support Structure and approved by the Village Engineer. An independent power source must be contained within a separate conduit on the existing Support Structure.
 - b. Providers shall coordinate, establish, maintain and pay for all power and communication connections with private utilities.
- 4. Wiring, Cables and Conduit Requirements.
 - a. All wiring and cables must be housed and fully concealed within the steel or other metal Support Structure pole and extended vertically within a flexible conduit. In non-steel or solid Support Structures, all wiring and cables must be fully concealed and appropriately protected and covered with a material that matches the non-steel or solid Support Structure so as not to be visible from public view.
 - b. Above ground wires, cables, connections and conduits are prohibited, except as specified in this Design Guideline Manual based on the Support Structure.

- c. Spools and/or coils of excess fiber optic or coaxial cables or any other wires shall not be stored on the Pole except completely within the approved enclosures or cabinets.
- 5. Lighting associated with Communications Facilities is prohibited, except when incorporated into new or existing approved decorative lighting poles and/or streetlights. Any internal lights associated with electronic equipment must be shielded from public view.
- 6. Signage. Signage is prohibited on all Communications Facilities and Support Structures, including stickers, logos, and other non-essential graphics and information unless required by the FCC.
- 7. Public Safety Communications. Small Wireless Facilities shall not interfere with public safety communications or the reception of broadband, television, radio or other communication services enjoyed by the occupants of nearby properties.

B. Existing Support Structures

- 1. Reserved Space. The Village may reserve space for future public safety or transportation uses in the Public ROW or on a Pole, Tower or Support Structure owned by the Village in accordance with an approved plan in place at the time an Application is filed.
 - a. A reservation of space shall not preclude placement of a Pole or the Collocation of a Communications Facility.
 - b. If replacement of the Village's Pole or Support Structure is necessary to accommodate the Collocation of the Communications Facility and the future use, the Provider shall pay for the replacement of the Pole or Support Structure and shall design and construct the replacement Pole or Support Structure in a manner that is able to accommodate the future use.

C. New Pole, Tower or Support Structures

1. Location.

- a. Required Setbacks.
 - (1) The centerline of a new Pole, Tower or Support Structure shall be installed in alignment with existing street trees and other poles along the same Public ROW whenever possible.
 - (2) In no case shall a new Pole, Tower or Support Structure be located less than what is required in the License Agreement from any of the road-way/face of curb, sidewalk, or shared use path as measured to the nearest part of the Support Structure.

- (3) New Poles, Towers or Support Structures shall be located a minimum of six feet (6') from any permanent object, structure or existing lawful encroachment into the Public ROW, or as determined in the License Agreement.
- (4) Support Structures for Small Wireless Facilities located outside of the Public ROW shall be set back from the property line of the lot on which it is located a distance equal to not less than the total height of the facility, including the Support Structure, as measured from the highest point of such Support Structure to the finished grade elevation of the ground on which it is situated, plus 10% of such total height. The Planning Board may reduce such setback requirements based upon consideration of lot size, topographic conditions, adjoining land uses, landscaping, and other forms of screening and/or structural characteristics of the proposed Support Structure.
- b. Required Spacing. A minimum of three hundred linear feet (300 1.f.) between Poles, Towers, Support Structures or Communication Facilities is required. To the extent feasible, any new or replacement Pole, Tower or Support Structure constructed in the Public ROW shall be located at the property line between two (2) residentially zoned properties and not in the direct line of site from the front of a residential structure.

2. Design Requirements.

- a. Shape and Dimensions. All new Poles, Towers or Support Structures shall be constructed of solid hot-dipped galvanized steel and shall be round with the Pole shaft tempered in diameter from the base to the top with a maximum of twelve inches (12") at the base.
- Aesthetics. In appropriate locations and districts, decorative poles shall be utilized to complement the existing character of the applicable corridor of the Village.
- c. Transformer Base. All new Poles, Towers or Support Structures shall include a one-piece cast aluminum alloy transformer base in a breakaway design, consistent with engineering standards subject to the Engineer for the Village's review and approval. A transformer base shall be no larger than nine cubic feet (9 ft³).

d. Foundation/Footer.

(1) All new Poles, Towers or Support Structures shall be supported with a reinforced concrete foundation or footer that is designed by a professional engineer, subject to the Engineer for the Village's review and approval.

- (2) Anchor bolts must be constructed from steel (high strength) per ATSM A36, threaded (J-Type/L-Type), hot dip galvanized steel per ODOT CM Item No. 711.02, and in a strength and diameter recommended by a professional engineer, subject to the Engineer for the Village's review and approval.
- (3) All anchor bolts must be concealed from public view with an appropriate Pole boot or cover, powder coated to match the Pole, Tower or Support Structure.
- e. Color. New Poles, Towers or Support Structures, including the breakaway transformer base, shall have a powder coated finish in dark earth tone colors such as dark green, dark brown, gray, or black, consistent with the color of other Poles, Towers or Support Structures in the immediate vicinity, unless other colors are approved by the Village.
- 3. Multiple Requests. If multiple requests are received by the Village to install two (2) or more Poles, Towers or Support Structures that result in the violation of the applicable spacing requirements outlined herein, or to collocate two (2) or more Communications Facilities on the same Pole, Tower or Support Structure, the Village may resolve conflicting requests through whatever reasonable and nondiscriminatory manner it deems appropriate.
- 4. Alternate Location. The Village reserves the right to propose an alternate location to any proposed location of a new Pole, Tower or Support Structure, that is within one hundred feet (100') of the proposed location or within a distance that is equivalent to the width of the Public ROW in or on which the new structure is proposed, whichever is greater, which the Provider shall use if it has the right to do so on reasonable terms and conditions and the alternate location does not impose technical limits or significant additional costs.

5. Waiver.

- a. A Provider may seek a waiver from the Planning Board of the undergrounding or alternative location requirements for the placement of a new Pole, Tower or Support Structure to support Communications Facilities if the Provider is unable to achieve its service objective using a Communications Facility under the following circumstances:
 - (1) From a location in the Public ROW where the prohibition does not apply;
 - (2) In a utility easement the Provider has the right to access; or
 - (3) In or on other suitable locations or structures made available by the Village subject to reasonable rates, fees, and terms.

b. The Village shall process waivers in a reasonable and nondiscriminatory manner that does not have the effect of prohibiting the provision of Wireless Services.

D. Antenna

- 1. Location. All Antenna to be installed on new or existing Poles, Towers or Support Structures shall be mounted flush to the top of the Pole, Tower or Support Structure and aligned with the centerline of the Pole, Tower or Support Structure, unless otherwise agreed to by the Village based on the specific context and characteristics of the Communications Facility.
- 2. Size. Each Antenna shall be located entirely within an enclosure of not more than three cubic feet (3 ft³) in volume or, in the case of an Antenna that has exposed elements, the Antenna and all of its exposed elements could fit within an enclosure of not more than twelve cubic feet (12 ft³) in volume.

3. Design.

- a. Shape. Antennas shall be cylindrical in shape or shall be located entirely within a cylindrical canister or shroud.
- b. Color. Exposed Antennas and Antenna enclosures shall match the color specifications of the Pole, Tower or Support Structure, unless other colors are approved by the Village.

E. Small Wireless Facilities Installed on Support Structures

- 1. Size. Exclusive of the Antenna, all wireless equipment associated with the Communications Facility shall not cumulatively exceed twenty-eight cubic feet (28 ft³) in volume. The calculation of equipment volume shall not include electric meters, concealment elements, telecommunications demarcation boxes, grounding equipment, power transfer switches, cut-off switches, and vertical cable runs for the connection of power and other services.
- 2. Equipment Enclosures. All Communications Facilities mounted to Poles, Towers or Support Structures or located on the ground shall be fully contained within enclosures or cabinets.
- 3. Required Clear Height. All Communications Facilities mounted to a Pole, Tower or Support Structure shall provide a minimum of ten feet (10') of clear space on the Pole as measured from established grade to the lowest point of any facility/equipment cabinets or concealment apparatus mounted to the Pole, Tower or Support Structure.
- 4. Maximum Horizontal Offset from Support Structure. Communications Facility equipment cabinets or enclosures shall not extend more than ten inches (10") beyond the Pole, Tower or Support Structure centerline in all directions.

5. Design.

- a. Cabinet or Enclosure Shape. Communications Facility equipment cabinets or enclosures shall be rectangular in shape, with the vertical dimensions being greater than the horizontal. Generally, the cabinet or enclosure shall be no wider than the maximum diameter of the Support Structure.
- b. Installation. All Pole mounted equipment cabinets or enclosures must be installed as flush to the Pole as possible. Any installation brackets connecting the cabinets or enclosure to the Pole shall not extend more than two inches (2") from the Pole and shall include metal flaps (or wings) to fully conceal the gap between the cabinet and Pole.
- c. Color. Cabinets or enclosures shall match the color specification of the Pole, Tower and/or Support Structure, unless other colors are approved by the Village.

F. Ground Mounted Small Wireless Facilities

1. Location.

- a. Required Setbacks.
 - (1) In no case shall ground mounted Small Wireless Facilities be located no less than required in the License Agreement from the roadway/face of curb, sidewalk, or shared use path as measured to the nearest part of the cabinet or enclosure.
 - (2) Ground mounted Communications Facilities and associated required screening or shrouding shall be located a minimum of six feet (6') from any permanent object or existing lawful encroachment into the Public ROW.
- 2. Size. All Communications Facility equipment shall not cumulatively exceed twenty-eight cubic feet (28 ft³) in volume. The calculation of equipment volume shall not include electric meters, concealment elements, telecommunications demarcation boxes, grounding equipment, power transfer switches, cut-off switches, and vertical cable runs for the connection of power and other services.
- 3. Maximum Permitted Height. The maximum height for ground mounted Communications Facilities shall not exceed two and one-half feet (2½') as measured from established grade at the base of the facility.
- 4. Equipment Enclosures Required. All ground mounted Communications Facilities shall be fully contained within enclosures or cabinets.
- 5. Design Requirements.

- a. Concealment. Ground-mounted equipment shall incorporate concealment elements into the proposed design matching the materials of the Support Structure, unless other materials are approved by the Village. Concealment may include, but shall not be limited to, landscaping, strategic placement in less obtrusive locations. Landscaping concealing equipment enclosures shall be planted in such quantity and size such that 100% screening is achieved within two (2) years of installation. Landscaping shall be continuously maintained but shall not result in over-growth of the public right-of-way area and shall minimize its presence while achieving the goal of screening.
- b. Concrete Pad or Slab. In accordance with state and local standards approved by the Code Enforcement Officer.
- c. Breakaway Design. All objects placed within the Public ROW shall feature breakaway design.
- d. Color. Ground mounted Communication Facility cabinets and enclosures shall have a powder coated finish in dark earth tone colors such as dark green, dark brown, gray, or black, unless other colors are approved by the Village.

G. Construction and Safety Requirements

- 1. Approval of the collocation, replacement or modification of a Pole, Tower or Support Structure is conditioned upon the Provider's assumption of costs if the Village determines such is necessary for compliance with its written construction or safety standards.
- 2. Prevention of failures and accidents. Any Provider who owns a Communications Facility sited in the Public ROW or upon Village-owned property shall at all times employ ordinary and reasonable care and shall install, maintain and use nothing less than the best available technology for preventing failures and accidents which are likely to cause damage, injury, or nuisance to the public.
- 3. Compliance with fire safety and FCC regulations. Communications Facilities, wires, cables, fixtures, and other equipment shall be installed and maintained in compliance with the requirements of the National Electric Code, all FCC, state, and local regulations, and in such manner that will not interfere with the use of other property, public safety communications or the reception of broadband, television, radio or other communication services enjoyed by occupants of nearby properties.
- 4. Wind and Ice. All Communications Facilities shall be designed to withstand the effects of wind gusts and ice to the standard designed by ANSI, as prepared by the engineering departments of the Electronics Industry Association, and Telecommunications Industry Association (ANSI/EIA/TIA-222, as amended).
- 5. Surety bond or equivalent financial tool for cost of removal. All Providers shall procure and provide to the Village a renewable bond, or shall provide proof of an

equivalent financial mechanism, which may include a funds set-aside and a letter of credit, to ensure compliance with all provisions of these Standards and Guidelines. The renewable bond or equivalent financial method shall cover the cost to remove unused or abandoned Small Wireless Facilities or damage to Village property caused by a Provider or its agent for each Communications Facility which the Provider installs in the Public ROW or upon Village-owned property.

- H. Indemnify and Hold Village Harmless. Any Provider who owns or operates a Communications Facility or a Pole, Tower or Support Structure in the Public ROW or upon Village-owned property shall, to the fullest extent permitted by law, indemnify, protect, defend, and hold the Village and its elected officials, officers, employees, agents, and volunteers harmless from any and all penalties, damages, costs, or charges arising out of any and all claims, suits, demands, causes of action, or award of damages, whether compensatory or punitive, or expenses arising therefrom, either at law or in equity, which might arise out of, or are caused by, the placement, construction, erection, modification, location, product performance, use, operation, maintenance, repair, installation, replacement, removal, or restoration of said facility. With respect to the penalties, damages or charges referenced herein, reasonable attorneys' fee, consultants' fees and expert witness fees are included in those costs that are recoverable by the Village.
- I. Said Provider shall also hold the Village and/or its agent(s) harmless in the event any action by the Village and/or its agent(s) negligently or recklessly disrupts, destroys, and/or incapacitates the small cell facility or wireless support structure situated in the Public ROW or Village-owned property in accordance with these Design Guidelines and Standards.